2018 to 2020

Q10051404 - Disk capacity is '250GB'. But when I connect it to Areca controller in JBOD mode, Windows system sees the disk capacity as 232.8 GB. Where did the other capacity go?

There are two ways to calculate Gigabyte (GByte): Using base 2 or using base 10. The operating systems use the base 2 “1024” definition of GByte, while disk drive manufacturers use the base 10 “1000” definition. Base 10 would define GByte as 1000 x 1000 x 1000. Base 2 would define GByte as 1024 x 1024 x 1024. Regardless of which scheme is used, you have exactly the same about of usable capacity. Areca RAID controller volumes are simulated a big disk drive and use the base 10 “1000” definition same disk drive manufacturers. Raw unformatted capacity of a hard disk drive is usually quoted with “SI prefix” (metric system prefix), incrementing by powers of 1000. The operating systems report the formatted capacity of a hard drive using “binary prefix” units which increment by powers of 1024.

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